



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

M60050.002655  
MCAS EL TORO  
SSIC #5090.3

June 17, 1997

Mr. Joseph Joyce  
BRAC Environmental Coordinator  
AC/S, Environment (1AU)  
MCAS El Toro  
P. O. Box 95001  
Santa Ana, CA 92709-5001

Re: EPA Comments on June, 1997 Draft Ground Water Remediation Pilot Test Work Plan,  
Marine Corps Air Station El Toro, Ca

Dear Mr. Joyce:

Please find attached to this cover letter, the United States Environmental Protection Agency's (EPA) comments to the document referenced above. Comments have been provided by Herb Levine, EPA's hydrogeologist. If you have any questions, please feel free to contact me at (415) 744-2210.

Sincerely,

A handwritten signature in cursive script, reading "Glenn R. Kistner".

Glenn R. Kistner  
Remedial Project Manager  
Federal Facilities Cleanup Branch

Attachment

cc: Tayseer Mahmoud, DTSC  
Larry Vitale, RWQCB

June 17, 1997

MEMORANDUM

**SUBJECT:** Review of Draft Groundwater Remediation Pilot Test Work Plan  
Marine Corps Air Station El Toro, CA

**TO:** Glenn Kistner, RPM  
Navy Section

**FROM:** Herbert Levine, Hydrogeologist  
Technical Support Team

I have reviewed this document for technical adequacy and consistency with previous discussion with SWDIV and their contractor. I have several items of concern which should be addressed.

The first item is related to the scope of this project. It is my recollection that we had discussed several times investigating where and how the shallow groundwater unit interacts with the principle aquifer. During previous technical meetings with SWDIV, their contractor presented this as an objective which we had consensus on. Now it is missing from this plan. I recommend that we pursue this as part of this field effort.

The second item is related to groundwater sampling. It is my understanding that previous sampling efforts had used a submersible pump to collect all groundwater samples. This plan proposes using a bailer to collect VOCs and a pump to collect the remaining analytes. I recommend not using a bailer and collecting all samples using a submersible pump. This would ensure consistency and likely produce more reliable and data. The concern here is the potential for loss of VOCs while using the bailer and a potential for the bailer to act as a surge block and introduce formation materials.

The third item is related to the proposal to test a recirculating well. It has been our experience that recirculating wells work in homogeneous and transmissive environments. The heterogeneity found at El Toro along with the associated difficulties encountered during aquifer pumping tests and the air sparging tests raises concerns with me that this technology might not be suited for application at El Toro. I raised these concerns with SWDIV and their contractor and we had a discussion regarding these concerns. We discussed raising these issues with the vendor who would install this technology and ask them to provide interpretations and conclusions of other applications at military installations. SWDIV also further explained their objectives for trying this technology. I agree with their objectives and understand the limitations they may face applying above ground treatment systems on an active base. I suggest that we have more

discussions with SWDIV on this issue as they develop the work plan addendum for the recirculating well test.

While these comments should be addressed before the document goes final, these issues do not preclude the Navy from initiating the CPT work.